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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,745

02/09/2004

Eric Theodore Bax

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05/08/2009

AVAYA INC.

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ROOM 1N-391

LINCROFT, NJ 07738

EXAMINER

PANNALA, SATHYANARAYA R

ART UNIT

PAPER NUMBER

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MAIL DATE

DELIVERY MODE

05/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/775,745	Applicant(s) BAX, ERIC THEODORE	
	Examiner Sathyanarayan Pannala	Art Unit 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

REOPENED

1. In view of the Appeal Brief filed on 2/4/2009, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 as (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164

2. Applicant filed on 2/4/2009 an Appeal Brief. In this Office Action, claims 1-6 are pending.

Double Patenting

3. Claim 1 and 4 are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 6. Applicant clearly stated that the claims in the response to non-final office action (see Remarks section, page 9, par. Two, filed on 9/21/2007). When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beesley (US Patent 7,072,880) hereinafter Beesley, and in view of Dorst (USPA Pub. 20040098549 A1) hereinafter Dorst.

6. As per independent claim 1, Beesley teaches a special encoded (finite-state) network is applied to an input string from a formal language and a set of labeled numbers that correspond to substrings of an input string is returned. Beesley teaches the claimed, a method for performing multi-counter evaluation of a text, said method comprising computer-implemented (col. 4, lines 3-7). applying to the text a merged finite-state machine representing a plurality of single-counter finite-state machines each representing a different one of a plurality of counters and wherein at least one state of the merged finite-state machine each corresponds to a multiplicity of states each of a different one of said single-counter finite-state machines, augmented with state value lists where each state value list indicates which counter of the multi-counter receives which values value for the 6tato, and state of the merged finite-state machine (Fig. 13-14, col. 13, lines 56-67 and col. 14, lines 16-24 and lines 30-33) (it is obvious that a finite machine will counting substrings or words in a string is independent of other counters and not dependent on operation of other counters);

accumulating the values of the states of the merged finite-state machine separately for each counter, thereby producing a list of counter score (Fig. 13-14, col. 13, lines 56-67 and col. 14, lines 16-24, lines 30-33). Beesley does not explicitly teach using multi-counters. However, Dorst teaches multiple counters in a finite state machine (Fig. 1, 5, par. [0071]). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Dorst's teachings would have allowed Beesley's method to provide flexibility to use memory controller to control a multitude of memory circuits in a simple-to-use manner (par. [0006]); and

Beesley teaches the claimed, updating each counter with its counter score (col. 14, lines 51-58).

7. As per independent claim 2, Beesley teaches a special encoded (finite-state) network is applied to an input string from a formal language and a set of labeled numbers that correspond to substrings of an input string is returned. Beesley teaches the claimed, a method for performing evaluation of a text, said method comprising computer-implemented (col. 4, lines 3-7). A method for performing multi-counter evaluation of a text, said method comprising computer-implemented (col. 4, lines 3-7), steps of:

applying to the text a merged finite-state machine representing a plurality of single-counter finite-state machines each representing a different one of a plurality of counters and wherein at least one state of the merged finite-state machine each corresponds to a

multiplicity of states each of a different one of said single-counter finite-state machines, augmented with state value lists where each state value list indicates which patterns in which counters of the found when the state of the merged finite-state machine is entered (Fig. 13-14, col. 13, lines 56-67 and col. 14, lines 16-24 and lines 30-33) (it is obvious that a finite machine will counting substrings or words in a string is independent of other counters and not dependent on operation of other counters); producing a list of patterns for each counter (Fig. 13-14, col. 13, lines 56-67); and Beesley teaches the claimed, updating each counter with its list of patterns (col. 4, lines 3-7). Dorst teaches multiple counters in a finite state machine (Fig. 1, 5, par. [0071]). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Dorst's teachings would have allowed Beesley's method to provide flexibility to use memory controller to control a multitude of memory circuits in a simple-to-use manner (par. [0006]).

8. As per independent claim 3, Beesley teaches a special encoded (finite-state) network is applied to an input string from a formal language and a set of labeled numbers that correspond to substrings of an input string is returned (col. 4, lines 3-7). Beesley teaches the claimed, A method for constructing a finite-state machine augmented with state value lists, said method comprising the computer-implemented (col. 4, lines 3-7). steps of:

providing by computer an empty augmented finite-state machine that has only a start state, with no transitions and no value list (col. 6, lines 43-47);

accumulating each-by computer a finite-state machine of each counter of the multi-counter that corresponds to one or more pattern- amount pairs into the augmented finite-state machine to form a merged machine representing a plurality of single-counter finite-state machines each representing a different one of a plurality of counters and wherein at least one state of the merged finite-state machine each corresponds to a multiplicity of states each of a different one of said single-counter finite- state machines, including converting state values of states of the finite-state machines of the counters of the multi-counter into state-value lists of states of the merged machine, and updating the merged machine with the state-value lists (Fig. 13-14, col. 13, lines 56-67 and col. 14, lines 16-24 and lines 30-33) (it is obvious that a finite machine will counting substrings or words in a string is independent of other counters and not dependent on operation of other counters). Dorst teaches multiple counters in a finite state machine (Fig. 1, 5, par. [0071]). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Dorst's teachings would have allowed Beesley's method to provide flexibility to use memory controller to control a multitude of memory circuits in a simple-to-use manner (par. [0006]).

9. As per independent claim 5, Beesley teaches a special encoded (finite-state) network is applied to an input string from a formal language and a set of labeled

numbers that correspond to substrings of an input string is returned (col. 4, lines 3-7).

Beesley teaches the claimed, A method for adding a pattern that consists of a single sequence of characters and a corresponding pattern value-value, from a counter to an augmented finite-state machine, said method comprising the-computer-implemented

(col. 14, lines 16-24 and lines 30-33), steps of:

providing the pattern (Fig. 14, col. 14, line 18);

providing the corresponding pattern value (Fig. 14, col. 14, lines 51-52);

providing the augmented finite-state machine having a plurality of machine states and

representing a plurality of single-counter finite-state machines each representing a

different one of a plurality of counters and wherein at least one state of the augmented finite-state machine each corresponds to a multiplicity of states each of a different one

of said single-counter finite-state machines (Fig. 13-14, col. 13, lines 56-67 and col. 14, lines 16-24 and lines 30-33) (it is obvious that a finite machine will counting substrings or words in a string is independent of other counters and not dependent on operation of other counters);

advancing through the machine states as-by applying the machine to the sequence of characters as a text (Fig. 14, col. 14, lines 57-58);

if the machine would halt when applied to the sequence of characters as a text, then

adding states and transitions to the machine to prevent halting (col. 15, lines 6-51);

forbearing from the adding if the machine would not halt when applied to the sequence of characters as a text (col. 15, lines 6-51);

for a final state that would be reached by the machine supplemented with the added states and transitions, forming a state value list if the final state lacks a state value list, forbearing from forming a state value list if the final state has a state value list, and adding to the state value list a reference to the counter and the pattern value (col. 15, lines 6-51). Beesley does not explicitly teach using plurality of single counters. However, Dorst teaches multiple counters in a finite state machine (Fig. 1, 5, par. [0071]). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Dorst's teachings would have allowed Beesley's method to provide flexibility to use memory controller to control a multitude of memory circuits in a simple-to-use manner (par. [0006]); and Beesley teaches the claimed, updating each counter with its counter score (col. 14, lines 51-58).

Allowable Subject Matter

10. Claim 6 is allowed because the applicant added the claim by combining claim 3 and objected dependent claim 4, and eliminating duplicate limitations. The prior art on record does not teach, suggest or disclose all limitations of claim 4. Additionally, Applicant have to withdraw claims 1 and 4 to overcome the objection of duplicate claims.

11. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments filed 2/4/2009 in the Appeal Brief have been fully considered but they are not persuasive and details as follows:

a) Applicant's argument stated that Beasley uses a counter instead of using plurality of counters as "Beasley teaches a finite-state network that contains a series of domains (finite-state machines) 350-354 (Beasley, figures 8 and 9). Each domain 350-354 has a counter that counts the number states indicating the number of paths leading from the previous state (Beasley, col. 9, lines 32-39). The counts/counters for-each domain are separate and unique to each domain (Beasley, col. 4, lines 60-65). A single domain does not have a plurality of counters associated with the domain .as required by claims 1-3 and 5."

In response to Applicant argument, Examiner added a new prior art of Dorst replacing the existing prior art of Perotto. Dorst teaches as "The counters load on specific input event(s), for example, a change of state in a finite state machine. The counters then count a number of clock cycles, specified by the bit values for a respective parameter. Upon reaching the count-down value, the counters trigger an output event, for example, by causing a change of state in a finite state machine. The

memory controller 1005 re-uses counters where possible to implement counting for multiple events.” (Fig. 1, 5, par. [0071]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sathyanarayan Pannala/
Primary Examiner, Art Unit 2164

srp
May 4, 2009